

DNpot=	796	kg/d	=a*(0.75*OURc*VdV)/2.9	Eqn 5-7 A
GEN BALANCE				
TN_Load=	1280.448	kg/d	=Q*(TKNo+NO3No)/1000	
WASN=	6.24	mg/L	=IF(SRT>10,0.05*BODo,0.04*BODo)	
Q*WASN=	228	kg/d	=Q*WASN/1000	mg
NN=	1035	kg/d	=Q*(TKNo-TKNeff-WASN)/1000	28
NDN=Dncap=	779	kg/d	=NN+Q*(NO3No-NO3Neff)/1000	21
OK !, DNpot>DNcap				
DNcap=NND/BODo	0.137	ENOUGH C !	ReqDNpot =	0.127 = a*(0,75*
TNeff				
NO3Neff=	6.49	mg/L	kg NO3N/d=	237 kg/d
TNeff=	6.99	<10 OK !		

Design Method:	ATV 131 - 2000	
	Influent to & Effluent from AT	
	Influent, mg/L	Effluent,mg/L
Do =	156.00	25.00
o=	175.00	35.00
No=	35.10	0.50
orgN	14.04	0.00
NH4N	21.06	0.50
3N=	0	7.00
=	35.1	10.00
	8	3.00

Changed to:
6.49
6.99

OK !, DNpot > DNcap

SRT	Reqd C
6	32.5

6.29
 $= 25 * 1.072^{(12-T)}$
 C

$(BOD_0 - ((1 - 0.2) * 0.17 * 0.75 * SRT * FT)) / (1 + 0.17 * SRT * FT)$

Biological P removed (0.01-0.015 of BOD Load)
 $p_{BioP} = 6.8 * (TP_0 - TP_{eff} - 0.01 * BOD_0 - 0.01 * BOD_0)$

$^{(1/3)}$

Stable if T > 14.9 C

$0.17 * FT * SRT)$

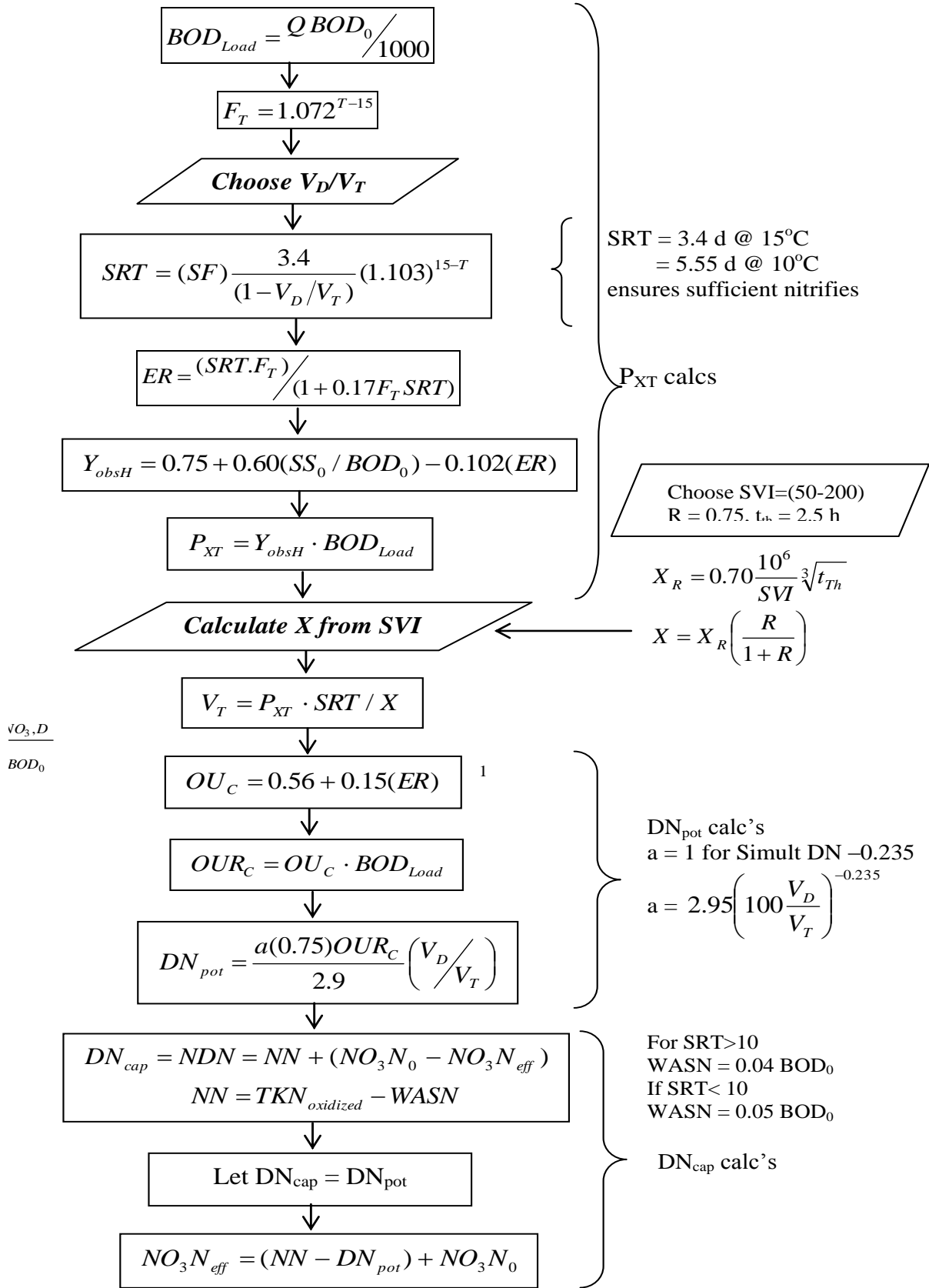
Eqn 5-7 ATV p 28

$0.04 * BOD_0)$	mg/L
$(N)/1000$	28.36
$(ff)/1000$	21.36

$$Req'd DN_{cap} = \frac{S_N}{C_1}$$

¹ ER = Endogeneous res

ATV in a Nutshell



$\frac{\sqrt{O_3, D}}{BOD_0}$

piration term